

REMARKS

Claims 1-9 are in the case as of the date of this amendment.
No claims have been allowed.

Claims 1-9 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Farley et al. (Farley), U.S. Patent 5,257,185, in view of Lynn Greene, VII (Greene), U.S. Patent 5,727,204.

With respect to independent claim 1, the Examiner (starting on page 5 of the instant office action) contends that:

"Farley discloses a database and information system arrangement for use in designing an architecture for a mission (see col. 10, lines 32-50), comprising:

Farley teaches a first section for storing information related to operational activities of said mission (see col. 10, lines 35-50, FIG. 1B);

Farley teaches a second section coupled to said first section for storing information related to data associated with said operational activities (see col. 10, lines 48-67); and

Farley teaches a third section coupled to said first section and said second section for storing information related to organizations permitted to carry out said operational activities and for storing information related to storage locations for said data (see col. 4, lines 3-9 and col. 23, lines 31-41 et seq.).

Farley does not explicitly indicate the claimed "warfare mission".

Greene discloses the claimed warfare mission (rapid identification of objects is critical in applications as an electronic warfare in which the appropriate assets must be activated in real time to be effective (see col. 2, lines 39-43 et seq.)).

It would have been obvious to one of ordinary skill in the data processing art, at the time of the present invention to combine the teaching of the cited references because warfare mission of Greene's teachings would have allowed Farley's system to organize data representing an object attribute characteristic as a plurality of interval sets, as suggested by Greene at col. 1, lines 47-51. Warfare mission as taught by Greene improves all sets that contain elements are quickly identified on the fly (see col. 2, lines 54-57 at seq. of Greene)."

With respect to independent claim 6, the Examiner (starting on page 7 of the instant office action) contends that:

"Farley discloses a database and information system arrangement for use in designing an operational architecture for a mission (see col. 10, lines 32-50), comprising:

Farley teaches an operational process section describing operational activities of said mission, a sequence for said operational activities, problems associated with said operational activities and performance characterizations of said operational activities (see col. 10, lines 35-50, FIG. 1B);

Farley teaches a data section for identifying input data used by said operational activities and output data resulting from said operational activities (see col. 10, lines 48-67); and

Farley teaches an organizational section for identifying an organizational hierarchy and assets used to carry out said operational activities and for identifying storage locations for said input data and said output data (see col. 4, lines 3-9 and col. 23, lines 31-41 et seq.).

Farley does not explicitly indicate the claimed "warfare mission".

Greene discloses the claimed warfare mission (rapid identification of objects is critical in applications as an electronic warfare in which the appropriate assets must be activated in real time to be effective (see col. 2, lines 39-43 et seq.)).

It would have been obvious to one of ordinary skill in the data processing art, at the time of the present invention to combined the teaching of the cited references because warfare mission of Greene's teachings would have allowed Farley's system to organize data representing an object attribute characteristic as a plurality of interval sets, as suggested by Greene at col. 1, lines 47-51. Warfare mission as taught by Greene improves all sets that contain elements are quickly identified on the fly (see col. 2, lines 54-57 at seq. of Greene)."

This rejection is respectfully traversed.

In general, Farley et al. appear to teach an interactive, cross-referenced knowledge system having a development configuration by which

(i) a knowledge engineer enters knowledge content into a database, and

(ii) a user accesses the database for interactive learning, information retrieval and problem solving in a specified subject area.

The knowledge is organized by a hierarchy of topic nodes, with each node having an associated plurality of cross referenceable information units representing a variety of types or categories of information. The user controls the navigation path and information display sequence among information units in accordance with personal learning needs and style. One category can include a pattern of prompts and possible responses. The separation of knowledge content from program logic permits non-programmers to set up, modify and maintain the knowledge content of the system.

In general, Greene appears to teach a method to organize, store, and retrieve information in a database to facilitate rapid object identification. An interval set is defined as an interval on a number line. The database is built from a list of interval sets. The method organizes the interval sets such that a binary search may be used to quickly locate all interval sets of which a

value is a member, i.e., given a value, all sets that contain the value are quickly identified.

Applicants have studied the Examiner's dismissal of Applicants' arguments on pages 2-4 of the instant office action as well as the Examiner's specific rejections noted above. However, Applicants continue to respectfully disagree with the Examiner's position and arguments as will now be explained.

With respect to Applicants' independent claims 1 and 6, the Examiner first contends that Farley (at column 10, lines 35-50) teaches Applicants' "first section" (claim 1) or "operational process section" (claim 6). Applicants continue to contend that this cited portion of Farley merely teaches an interactive "question and answer" system that prompts a (system) user with questions that the user can

- (i) respond to,
- (ii) ask for clarification of the question,
- (iii) review related information, or
- (iv) change questions or topics.

The questions and responses from each user session are stored for possible retrieval at a later time. In contrast, Applicants' "first section" stores "information related to operational activities of a warfare mission". That is, the first section is an "operational process section" that describes "operational activities of the warfare mission, a sequence for the operational

activities, problems associated with the operational activities and performance characterization of the operational activities." See page 8, line 21, to page 9, line 8 of Applicants' originally-filed specification.

The Examiner (on page 2 of the instant office action) has responded to Applicants' above-noted argument by saying that (i) the storage of "challenger activities questions and the user responses" is the equivalent of Applicants "first section" or "operational process section", and (ii) Greene makes it obvious to extend the teachings of Farley to a warfare mission. However, Applicants respectfully submit that (i) Farley merely teaches an interactive system that provides for the storage of business problems/answers so that other users of the system can retrieve the stored answers (see column 10, lines 35-39 and lines 48-50), and (ii) Greene's set-oriented database merely allows one to determine which set(s) an input value is associated with. Thus, Applicants continue to respectfully submit that Farley's question/answer interactivity does not teach or suggest the storage of operational activities of a warfare mission (emphasis added) as taught and claimed by Applicants.

With respect to Applicants' independent claims 1 and 6, the Examiner next contends that Farley (at column 10, lines 48-67) teaches Applicants' "second section" (claim 1) or "data section" (claim 6). Applicants continue to contend that this cited portion

of Farley teaches that the (system) user has the ability to retrieve information and then customize a view/display of same to satisfy a particular user's (e.g., a sales rep) needs. The data used is merely raw data that is retrieved and then manipulated to satisfy a particular user's display needs. In contrast, Applicants' "second section" stores "information related to data associated with the operational activities" of the warfare mission. That is, the second section stores information that describes attributes of the data rather than the raw data itself.

Claim 6 states/claims this more specifically as the "data section" identifies "input data used by the operational activities and output data resulting from the operational activities." See page 9, line 9 to page 10, line 3 of Applicants' originally-filed specification.

The Examiner (on page 3 of the instant office action) has responded to Applicants' above-noted arguments by saying that "Farley teaches this limitation as applied responses associated with the question and each available response has a corresponding vector code, which define the branching activity that occurs when the response is selected by the end-user." Applicants respectfully submit that Farley's "vector code" is merely a pointer to the location (in the database) for the next logical question to be asked of the user. See column 25, lines 43-50. However, this "pointer" is neither "related to data associated

with said operational activities" (Applicants' claim 1) or identifies "input data used by said operational activities and output data resulting from said operational activities" (Applicants' claim 6). That is, the "vector code" is not related to any data at all, but merely indicates a location in a database.

Accordingly, Applicants respectfully submit that Farley's vector code does not teach or suggest the storage of information related to the data (emphasis added) as taught and claimed by Applicants.

With continued attention to Applicants' independent claims 1 and 6, the Examiner further contends that Farley (at column 4, lines 3-9, and column 23, lines 31-41 et seq.) teaches Applicants' "third section" (claim 1) or "organizational section" (claim 6). Applicants contend that these cited portions of Farley merely teach:

- (i) at column 4, that a user can control what/how items will be displayed and that the user-defined items can be stored modularly; and
- (ii) at column 23, that certain users can update stored content.

In contrast, Applicants' "third section" stores "information related to organizations permitted to carry out the (warfare mission's) operational activities" and stores "information related to storage locations of data" (associated with the operational activities. More specifically, Applicants' third section can be

viewed as an "organizational section" that identifies "organizational hierarchy and assets" and "storage locations of the input/output data" used by the warfare mission's operational activities.

The Examiner (on page 3 of the instant office action) has responded to Applicants' above-noted arguments by saying that Farley (at column 13, lines 44-49) "teaches this limitation as a database having a relational database structure where client information is organized by subject, topics within a subject, subtopics within each topic, sub-subtopics within each subtopic, etc. Each of these various levels of content is comprised of the multiple, cross-referenced categories of information associated with it." While Applicants acknowledge that Farley has provided a brief definition of a relational database, Applicants respectfully disagree that this broad and generally-accepted definition teaches or suggests Applicants' "third" or "organizational" section that stores organizational and data location information for a warfare mission's operational activities. This is especially true since Farley does not teach or suggest the storage of any such operational activities as Applicants have previously pointed out.

Accordingly, Applicants respectfully submit that Farley does not teach or even suggest the storage of information relating to organizational attributes for the operational activities of a warfare mission as Applicants teach and claim.

Finally, the Examiner contends that Greene discloses that a warfare mission requires rapid identification of objects and that Greene's teachings would have allowed Farley's system to organize data representing an object attribute characteristic as a plurality of interval sets. Greene merely discloses a simple database defined by a plurality of sets with each set identifying a range of possible numeric values. An input numeric value is then compared to the sets to see which one or ones of the sets it belongs to. See column 1, lines 45-63. However, Applicants disagree that the organization of data into interval sets (as Greene teaches) is related to Applicants teachings inasmuch as Applicants do not disclose or claim any such interval set data arrangement. Accordingly, Applicants continue to respectfully submit that Greene does not teach or even suggest the unique database and information system arrangement taught by Applicants, and that the teachings of Greene do not overcome the above-described shortcomings of Farley.

The Examiner (on pages 3-4 of the instant office action) has responded to Applicants' above-noted arguments by saying that Farley (at column 5, lines 38-42 et seq.) teaches a "database and information management system arrangement" as administrative control provides system security defining four specific user types, each having specific access capability with respect to what can be written from, or what can be written to, the various files

of each system in the database." Applicants respectfully submit that the Administrative Component of Farley merely teaches a computer security system in which different user types are specified with each user type having a permitted amount of access capability. However, Applicants' teachings and claims do not even address security aspects of the database and information system. Accordingly, Applicants respectfully submit that this portion of the Examiner's argument does not apply to Applicants' claims.

None of the prior art cited by the Examiner appears to teach or even suggest the unique database and information system arrangement taught and claimed by Applicants in each of independent claims 1 and 6. Accordingly, in view of all the art of record, it is respectfully submitted that independent claims 1 and 6 are considered to patentably distinguish thereover.

With respect to dependent claims 2-5 and 7-9, Applicants will now address each of the Examiner's specific rejections as follows:

Regarding claim 2, the Examiner contends that Farley teaches a first section that comprises:

- a description section describing each of said operational activities (see col. 10, lines 48-50 et seq.);

- a sequencing section describing a sequence for said operational activities (see col. 10, lines 35-67); and

- an issue section for storing information related to problems associated with said operational activities (see col. 10, lines

48-53 et seq.).

Applicants respectfully submit that the cited portions of Farley do not teach a description, sequencing or issue section as Applicants' claim. Rather, the cited portions of Farley merely provide an overview of the system's interactive functions and the user's ability to customize a display output.

Regarding claim 3, the Examiner contends that Farley teaches a first section that further comprises a rating section for storing performance characterizations of said operational activities (see col. 18, lines 32-43).

Applicants respectfully submit that this cited portion of Farley merely describes a classification system, not performance characteristics.

Regarding claim 4, the Examiner contends that Farley teaches a second section that comprises:

an identification section for identifying types of said data (see col. 15, lines 1-7 et seq.); and

a definition section for storing detail information related to each of said types of data (see col. 10, lines 48-53 et seq.).

However, column 15, lines 1-7 of Farley merely describe a "log on" feature of the system, not data type identification as disclosed and claimed by Applicants.

Regarding claim 5, the Examiner contends that Farley teaches a third section that comprises:

a listing section for storing a list of said organizations (see col. 10, lines 48-53, Abstract);

a hierarchal section for defining authoritative relationships within each of said organizations (see col. 6, lines 30-38); and

an assignment section coupled to said definition section for identifying said storage locations for each of said types of said data (see col. 15, lines 1-7 et seq.).

Applicants respectfully submit that the relevant portion of column 10 and the Abstract of Farley do not even mention organizations, let alone a list of organizations permitted to carry out operational activities of a warfare mission. The relevant portion of column 6 of Farley describes parent/child relationships between nodes of a database, but is silent on any authoritative relationships between organizations. Finally, the cited portion of column 15 of Farley merely describe a "log on" feature of the system, not an assignment section that identifies storage locations for each type of data disclosed and claimed by Applicants.

Regarding claim 7, the Examiner contends that Farley teaches a data section that includes a data relationship section identifying relationships between input data and output data used by said operational activities (see col. 6, lines 30-42).

Applicants respectfully submit that the cited portion of column 6 of Farley describes parent/child relationships between

nodes of a database, but is silent on any identifying relationships between input and output data used by operational activities of a warfare mission as Applicants teach and claim.

Regarding claim 8, the Examiner contends that Farley teaches an importance section that identifies relative importance of the input data and output data used by said operational activities (see col. 10, lines 48-53 et seq.).

Applicants respectfully submit that the cited portions of Farley do not teach an importance section as Applicants' claim. Rather, the cited portions of Farley merely provide an overview of the system's interactive functions and the user's ability to customize a display output.

Regarding claim 9, the Examiner contends that Farley teaches a detail section that defines security classifications, categorical classifications, categorical hierarchies and update information associated with the input data and output data (see col. 6, lines 30-42 et seq.).

Once again, Applicants respectfully submit that the cited portions of Farley describes parent/child relationships between nodes of a database, but is silent on any identifying relationships between input and output data used by operational activities of a warfare mission as Applicants teach and claim.

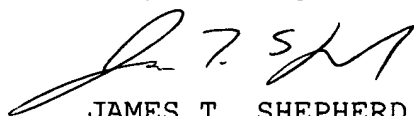
Accordingly, in view of all the art of record, it is respectfully submitted that claims 1-9 are considered to

patentably distinguish thereover.

It is submitted in view of these remarks that all grounds for rejection have been removed by the foregoing amendment. For the hereinabove reasons, Applicants solicit an early and favorable response.

In the event the Examiner remains of the opinion that the claims remaining in the case fail to define patentable subject matter, it is requested that the present amendment be entered for purposes of appeal.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J. T. Shepherd', is written over the typed name.

JAMES T. SHEPHERD
Attorney for Applicants
Reg. No. 43917

Naval Surface Warfare Center Panama City
Code XP01L
110 Vernon Ave.
Panama City, FL 32407-7001
(850) 234-4646